DTTER-YODER & ASSOCIATES **BARRETT & ASSOCIATES** CONSULTING ENGINEERS

MID - COASTSIDE AREA CONSULTANTS

RESOURCES ENGINEERING & MANAGEMENT CONSULTING ENGINEERS

July 12, 1979

Attochment 6

Sewer Authority Mid-Coastside 501 Main Street Half Moon Bay, California 94019

Attention: Mr. Fred Mortensen

Re: SAM Wastewater Management Facilities, Phase I,

Scope of Work, Budget and Schedule for

Step III Engineering Services.

Ref: P-General

Dear Mr. Mortensen:

Pursuant to the terms of the Agreement for Engineering Services between MAC and SAM executed in April 1976, attached for your review and approval are the scope of work, budget and schedule for the Step III engineering services for Phase I of SAM Project. Phase I of the project consists of the following:

Project Unit 1 - Intertie Pipelines

Project Unit 2 - Pumping Stations

Project Unit 4 - Ocean Outfall and Effluent Pump Station

Project Unit 5 - Reclamation Pipeline

Step III activities consist of construction of the above facilities in accordance with previously submitted plans and specifications to your office. Additionally, these activities include preparation of the required operations and maintenance manual for the constructed facilities, provision of construction management and startup services.

The Agreement for Engineering Services mentioned above, specifies that payments for each phase of the project be negotiated at the time work is authorized. The proposed services will be compensated for on the basis of a cost-plus-a-fixed fee method. In this method of compensation, the engineer is compensated for actual costs incurred while the "fixed fee" remains unchanged unless there is a significant increase in the scope of work. this occurs, a new "cost and fixed fee" must be negotiated.



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State and Federal regulations require that cost-plus-a-fixed-fee contracts provide for a limiting cost which cannot be changed without an amendment to the contract. In accordance with the above requirements, it is proposed that engineering services be compensated for with a limiting cost as follows:

		REM			B&V	B , H&A
	Unit 1	Unit 2	Unit 5	СМ	Unit 4	Unit 4
Step III Estimated Cost of Engineering Services:	154,645.60	60,118.00	63,052.40	41,180.00	165,538.95	20,184.01
Fixed Fee:	7,415.18	6,436.42	2,636.26	5,569.20	18,000.00	3,027.60
Total Engineering Cost:	162,060.78	66,554.42	65,688.66	46,749.20	183,538.95	23,211.61
Contingency @ 10%:	16,206.08	6,655.44	6,568.86	4,674.92	18,353.89	2,321.16
Total Limiting Cost:	178,266.86	73,209.86	72,257.52	51,424.12	201,892.84	25,532.77

The overall Step III engineering services costs for Phase I of SAM project are as follows:

Step III Cost of Engineering Services:	\$ 504,718.96
Fixed Fee:	43,084.66
Contingency @ 10%:	54,780.35
TOTAL ESTIMATED ENGINEERING SERVICES:	\$ 602,583.97

Attached are detailed tasks for the Step III services and a breakdown of man-hours and costs.

Step III engineering work in the area of preaward services has commenced per your authorization of March 14, 1979. The work and budget presented herein are for a period of construction of 18 (eighteen months). Should construction extend beyond that time limit, an addendum to the engineering fees would be negotiated, unless such delays result from delays of engineer other than directly attributed to normal construction activities.

The submitted budget includes services for Project Units 1, 2, 4 and 5. As you know actual bids for Units 1 and 4 have been received and awarding these two contracts is forthcoming. Moreover, Project Unit 2 will be advertised in the near future. It is respectfully requested that SAM approve the submitted budget for the above project units with the understanding that services for Units 2 and 5 may change upon receipt of construction bids, and budgets for Units 1 and 4 may be adjusted upon receipt of the actual proposals from sub-contractors.

For authorization to commence the work, please sign at the location below and return a copy of this letter to our office. As a result of our negotiations this submittal supersedes our previous submittal of April 10, 1979.

Please call if you should have any questions.

Very truly yours,

MID-COASTSIDE AREA CONSULTANTS

KAMIL S. AZQURY

Enclosures:

Scopes of Work

5700-41 Forms and Supplemental Information

Summary of Estimated Costs

Summary of Man-Hours Preliminary Schedules

Acceptance and Authorization to Proceed on outlined Step III Engineering Services.

SEWER AUTHORITY MID-COASTSIDE

X Date

cc: Ed Fernbach, Black & Veatch Mike Maggi, Barrett, Harris & Associates

KSA:kjs

STATEMENT REGARDING NEGOTIATIONS FOR SUBAGREEMENT TO PROVIDE PROFESSIONAL ENGINEERING SERVICES FOR STEP III CONSTRUCTION OF SAM INTERTIE PIPELINES, PUMP STATIONS, OCEAN OUTFALL AND RECLAMATION LINE.

Federal regulations (Section 35.937-5 (C-1) Federal Register) regarding negotiations of engineering subagreements require the following four items be discussed during the negotiations.

- The scope and extent of work and other essential features;
- 2. Identification of the personnel and facilities necessary to accomplish the work within the required time, including where needed, employment of additional personnel, subcontracting, joint ventures, etc.
- 3. Provision of the required technical services in accordance with regulations and criteria established for the project;
- 4. A fair and reasonable price for the required work, to be determined in accordance with the cost and profit considerations set forth in Sections 35-937-6 and 35-937-7 (of these regulations), and payment provisions.

I hereby certify that the above items were discussed during negotiations for this phase of the project.

SEWER AUTHORITY MID-COASTSIDE

Y	Data
<u> </u>	Date



I. GRANTE

Sewer Authority Mid-Coastside

PART I-GENERAL -

2. GRANT NUMBER

C-06-1022

. NAME OF CONTRACTOR OR SUBCONTRACTOR Resources Engineering & Management . Address of Contractor or Subcontractor (Include ZIP)	code)	6. TYPE OF SERV	July 11,	1979
. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP	code)	6. TYPE OF SERV	<u> </u>	
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040 77 0 4				
343 El Camino Real		CTED TIT E	nainanuina Ca	
South San Francisco	for Rid Do	ngineering Seriod and Cons	rvices	
California 94080		Activities	of Project U	truction
· · · · · · · · · · · · · · · · · · ·	COST SUM	1	or Froject of	
PARI II-	ESTI-			·
DIRECT LABOR (Specify labor categories)	MATED HOURS	RATE	ESTIMATED COST	TOTALS
Principal	50	\$ 24.00	\$ 1,200.00	PROPERTY AND THE
Project Manager	100	17.00	1,700.00	The Called W. A. T.
Project Engineer	416	13.00	5,408.00	
Staff Engineer	1040	11.50	11,960.00	\$40 miles - 140 miles - 1
Engineering Technician	150	9.00	1,350.00	
Clerical	82	5.50	451.00	
' DIRECT LABOR TOTAL:		经统治线等的特别	· 30、香味、中華(20)	s 22,069.00
INDIRECT COSTS (Specify Indirect cost pools)	RATE	× BASE =	ESTIMATED COST	
General	1.4	s 22,069.00	\$ 30,896.60	
•				建石器 上版
INDIRECT COSTS TOTAL:	2886			\$ 30,896.60
OTHER DIRECT COSTS	•			5/3 (8/8) T.
a. TRAVEL				
(1) TRANSPORTATION 70 miles @ \$0.15/mile for	300 tr	ins	5 3.200.00	
(2) PER DIEM		1-K-2	s	
TRAVEL SUBTOTAL:	TAKE S	FIGHT AND THE	s 3.200.00	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)	QTY	COST	ESTIMATED COST	
Xeroxing, Printing	-	\$	\$ 480.00	
Not on this is a second of the			100.00	
				10 (a) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
EQUIPMENT SUBTOTAL:	. 48244	经过来发生	480,00	
ç. SUBCONTRACTS			ESTIMATED COST	
Surveying	··		\$ 80,000.00	
Soils		······································	18,000.00	
	····			
SUBCONTRACTS SUBTOTAL:	1799	(A, 2) (B, A, 2) (B)	s 98,000.00	
d, OTHER (Specify cologories)			ESTIMATED COST	
	· - ··· · · · · · · · · · · · · · · · · 		s	
	·· · · · · · · · · · · · · · · ·	 		14.4500000000000000000000000000000000000
OTHER SUBTOTAL: ·		200 Sept. Sept. 18 18 18 18 18 18 18 18 18 18 18 18 18	s	1335
e. OTHER DIRECT COSTS TOTAL:		1735220		\$ 101,680.00
TOTAL ESTIMATED COST	لنستنا	<u> </u>	<u> </u>	\$ 154,645.60
- LOTAL BATHMATEN COST				\$ 7,415.18
XXXXXXX Fee 14%				3 162,060.78

SEWER AUTHORITY MID-COASTSIDE PHASE I STEP III CONSTRUCTION SERVICES SUMMARY OF ESTIMATED COST-REM PROJECT UNITS 1

This Budget has been prepared for 12 month construction period.

I.	BASIC A/E SERVICES					
	Α.	Assistance during bidding.				
	В.	Review contractor submittals.				
	C.	Other Standard Services.				
		SUBTOTAL:	\$19,600.00			
II.	<u>CON</u>	NTRACT ADMINISTRATION				
	Α.	Change Orders.				
	В.	Payments, Etc.				
٠		SUBTOTAL:	5,600.00			
III.	INS	PECTION AND RESIDENT ENGINEERING	23,765.60			
IV.	SUB	CONTRACTORS				
`	Α.	Surveyor	80,000.00			
•	В.	Soils	1,800.00			
		SUBTOTAL:	98,000.00			
٧.	SPE	CIAL SERVICES				
	Α.	As-Built Plans	2,000.00			
	В.	Qther	2,000.00			
		SUBTOTAL:	4,000.00			
VI.	OTH	ER COST FACTORS				
	Α.	Travel and Expenses (20,000 miles)	3,200.00			
	В.	Printing	480.00			
		SUBTOTAL:	3,680.00			
			The state of the s			

\$154,645.60

VII. FEES

Α.	Basic A/E. Design	\$	2,744.00		
В.	Contract Administration		784.00		
C.	Inspection and Resident Engineering		3,327.18		
D.	Special Services	,	560.00		
	SUBTOTAL:	\$	7,415.18		
Sub	Subtotal of Engineering Services Costs 162,060.78				
10%	Contingency		16,206.08		
ТОТ	AL ESTIMATED ENGINEERING SERVICES COSTS:	\$1	78,266.86		

SEWER AUTHORITY MID-COASTSIDE PROJECT UNIT 1 - INTERTIE PIPELINES SUMMARY OF MAN-HOURS

AND

DIRECT LABOR COSTS

Labor <u>Categories</u>	Approximate Hours/Week	Total <u>Hours</u>	Hourly Rate	Total Cost
Principal	1	50	\$24.00	\$ 1,200.00
Project Manager	2	100	\$17.00	\$ 1,700.00
Project Engineer	8	416	\$13.00	\$ 5,408.00
Staff Engineer	20	1040	\$17.50	\$11,960.00
Engineering Technician	3	150	\$ 9.00	\$ 1,350.00
Clerical	1.5	82	\$ 5.50	\$ 451.00
TOTAL				\$22,069.00

Project Unit 1 Construction Period is assumed to be 12 months.

